REMARKS

The final Office Action mailed May 11, 2011 has been carefully reviewed. From the Summary page, claims 1-7 were pending and rejected.

By this response, claims 1 and 4 are amended to more clearly set forth novel points of the invention. Support for the added language is found in the application as filed.

Claim Rejection under 35 U.S.C. § 103(a)

Claims 1-7 stand rejected as being unpatentable over Kawai et al. (US 5,313,395) in view of Santori et al. (US 7,076,411), and further in view of Mizushina et al. (US 4,984,988). Applicant respectfully traverses.

The rebuttal points raised by the Examiner set forth beginning on page ten of the Office Action have been considered.

The background section of the present specification describes the problem solved by the present invention, consider especially the paragraph bridging pages 2 and 3 of the specification and also the passage beginning on line 9, of page 3.[1]

The amendments to claims 1 and 4 indicate that a partial set of control values generated by the virtual controller corresponds to a subset of the engine control signal output from the control map. This

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[1] In the present invention, the source of most of engine control signals, including those which are not to be examined and not to be changed, are supplied from a predetermined control map in an actual controller to an actual engine. Some of the control signals only, which have been examined and changed, are supplied from a virtual controller to the actual engine for evaluation. In the present invention it is possible to conduct a transition in the transition state without replacing the steady-state data and to quickly obtain the control values that satisfy performance objectives. In addition with respect to the unaltered control values, the output from the actual ECU can be used as is and it is possible to alter the control values of the ECU with good efficiency. A "brute force" approach in engine development is avoided.

further distinguishes the claims from the Mizushima disclosure of "torque command signal is process into an electric current signal in accordance with a torque/current characteristic curve of a DC motor". [2]

It is not seen that the applied art, alone or in combination, is suggestive of the processing and responsible components associated with the use of the claimed output for use in the simulation.

Reconsideration is respectfully requested.

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[2] Mizushina et al. does teach a simulated engine characteristic control system. See figure 2. It does mention "map" (4) relative to a discussion of figure 1 (prior art) in the background section. It does not mention actual and virtual ECUs or their possible interplay. It does not appear to discuss steady state data or aid in the selection of control values.

CONCLUSION

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Therefore it is respectfully requested that the Examiner reconsider the presently outstanding rejection and that it be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action and, as such, the present application is in condition for allowance.
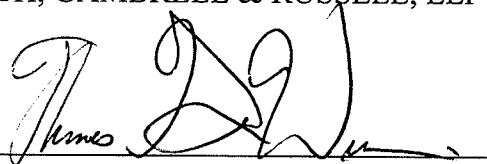
If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

It is not believed that extensions of time are required, beyond those that may otherwise be provided for in accompanying documents. However, in the event that additional extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required therefore are hereby authorized to be charged to **Deposit Account No. 02-4300, Attorney Docket No. 034201.006.**

Respectfully submitted,

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